

### **REMARKS**

Claims 1-44, and 49-77 are pending in the application. Claims 1-44 are allowed. Claims 45-48 have been canceled. Claims 49-50, 52, 63, 70 have been rejected under 35 U.S.C. § 102(a). Claims 51, 53-62, 64-69, 71-77 have been rejected under 35 U.S.C. § 103(a).

Applicants have added new dependent claims 78-80. These new claims do not add new matter.

#### **Rejections under 35 U.S.C. § 102(a)**

Claims 49-50, 52, 63, 70 have been rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 5,843,657 to Liotta et al. (hereinafter "Liotta").

With respect to claims 49 and 63, the Office stated that "Liotta discloses a Laser Capture Microdissection (LCM hereinafter) system comprising: a transfer film carrier or cap 5 (fig 2a), a LCM film coupled to the carrier 6 (fig 2a)." (Paper No. 29, pg. 1.) The Office has not given any patentable weight to the preamble which recites an integral portion of a biological reaction vessel. (Paper No. 29, pg. 5.) Applicants believe that the preambles of claims 49 and 63 are necessary to give life, meaning, and vitality to the claims. Therefore, the preambles of these claims should be construed as if in the balance of the claim. Applicants also believe that since the terminology of the preambles of claims 49 and 63 limit the structure of the claimed invention, the preambles must be treated as claim limitations. MPEP §2111.02. On this basis alone, applicants believe that the anticipation rejection should be withdrawn.

However, in order to clarify the invention and advance prosecution of the application, applicants have amended independent claims 49 and 63. In particular, claims 49 and 63 now recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. No new matter has been added and now the claims more clearly describe the structure and arrangement of the carrier and vessel. Furthermore, Liotta does not disclose a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. Therefore, the anticipation

rejection should be withdrawn and independent claims 49 and 63 and their respective dependent claims that were also rejected should be indicated as allowable over the prior art.

**Rejections under 35 U.S.C. § 103(a)**

Claims 51, 53-62, 64-69, 71-77 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,843,657 to Liotta et al. (hereinafter “Liotta”) in view of U.S. Patent No. 5,427,950 to Shigematsu et al. (hereinafter “Shigematsu”) and further in view of U.S. Patent No. 3,995,941 to Nagahara et al (hereinafter “Nagahara”). Applicants traverse this rejection. In order to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. MPEP §2143.

**Claims 51 and 76**

With respect to claims 51 and 76, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 51 and 76. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 51 recites a scattering media in proximity to the laser capture microdissection transfer film. Claim 76 recites at least one diffuser coupled to the transfer film carrier. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a scattering media nor does the prior art disclose, teach or suggest a diffuser according to claims 51 and 76. The Office states that the limitations of a scattering media and diffuser involve only routine skill in the art. Applicants traverse this statement and request that the Office provide rationale to support the statement that using a scattering media in proximity to the transfer film or a diffuser coupled to the carrier is common knowledge in the art.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a scattering media or diffuser that would be combinable with Liotta given some motivation or suggestion to do so. Therefore, the first criterion requires some suggestion or motivation to be found in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of ordinary skill in the art to modify Liotta to use a scattering media or diffuser. A suggestion or motivation must be had by one of ordinary skill in the art to modify Liotta with routine skill in the art. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Office has not only pulled the limitations of a scattering media and diffuser from the bag of one of ordinary skill in the art without support, but also, has not provided the motivation or suggestion to apply that limitation to Liotta and modify Liotta to (1) include a scattering media and (2) to locate it in proximity to the transfer film, and (1) include a diffuser and (2) couple it to the carrier in order to achieve the present invention as claimed in claims 51 and 76, respectively. For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claim 51 depends from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met because the prior art does not disclose, teach or suggest these additional claim limitations herein added by amendment. Hence, applicants believe claim 51 is not obvious and respectfully request the rejection to be withdrawn.

**Claims 53 and 71**

With respect to claims 53 and 71, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 53 and 71. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claims 53 and 71 recite a transfer film that is hot vacuum baked onto the substrate surface. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a transfer film that is hot vacuum baked onto the substrate surface. The Office states that the limitation of a transfer film that is hot vacuum baked onto the substrate surface involves only routine skill in the art. Applicants traverse this statement and request that the Office provide rationale and support for the statement that hot vacuum baking a transfer film to the substrate surface is common knowledge in the art.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a transfer film that is hot vacuum baked onto the substrate surface that would be combinable with Liotta given some suggestion or motivation to do so. Therefore, the first criterion requires some suggestion or motivation to be found in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of ordinary skill in the art to modify Liotta to hot vacuum bake a transfer film to the substrate surface. A suggestion or motivation must be had by one of ordinary skill in the art to apply something the Office calls routine skill in the art. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Office has not only pulled the limitation of hot vacuum baking a transfer film from the bag of one of ordinary skill in the art without support, but also has not shown the motivation or

suggestion to apply that limitation to Liotta and modify Liotta to hot vacuum bake a transfer film to the substrate surface in order to achieve the present invention. For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claim 53 depends from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met because the prior art does not disclose, teach or suggest these additional claim limitations herein added by amendment. Hence, applicants believe claim 53 is not obvious for this additional reason and respectfully request the rejection to be withdrawn.

#### **Claim 54**

With respect to claim 54, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claim 54. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 54 recites bonding the transfer film to the substrate surface with a refractive index matching transparent glue. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest bonding the transfer film to the substrate surface with a refractive index matching transparent glue. The Office states that the limitation involves only routine skill in the art. Applicants traverse this statement and request that the Office provide rationale and support for the statement that bonding the transfer film to the substrate surface with a refractive index matching transparent glue is common knowledge in the art.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing such a bonding limitation that would be

combinable with Liotta given the motivation or suggestion to do so. Therefore, the first criterion requires some suggestion or motivation to be found in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of ordinary skill in the art to modify Liotta to bond the transfer film to the substrate surface with a refractive index matching transparent glue. A suggestion or motivation must be had by one of ordinary skill to apply something called routine skill in the in order to modify Liotta. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Office has not only pulled the limitation of bonding the transfer film to the substrate surface with a refractive index matching transparent glue from the bag of one of ordinary skill in the art without support, but also, has not shown the motivation or suggestion to apply that limitation to Liotta and modify Liotta in that fashion in order to achieve the present invention. For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claim 54 depends from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met because the prior art does not disclose, teach or suggest these additional claim limitations herein added by amendment. Hence, applicants believe claim 54 is not obvious and respectfully request the rejection to be withdrawn.

#### **Claims 55 and 72**

With respect to claims 55 and 72, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 55 and 72. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claims 55 and 72 recite a particular negative draft on the transfer film carrier.

Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a negative draft on the transfer film carrier. The Office states that this limitation involves only routine skill in the art. Applicants traverse this statement and request that the Office provide rationale and support for the statement that a negative draft on a transfer film carrier is common knowledge in the art.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a negative draft that would be combinable with Liotta given the motivation or suggestion to do so. Therefore, the first criterion requires some suggestion or motivation in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of ordinary skill in the art to modify Liotta such that the transfer film carrier includes a negative draft. A suggestion or motivation must be had by one of ordinary skill to employ something the Office calls routine skill in the art in order to modify Liotta. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Office has not only pulled the limitation of a negative draft from the bag of one of ordinary skill in the art without support, but also, has not shown the motivation or suggestion to apply that limitation to Liotta and modify Liotta in that fashion in order to achieve the present invention. For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claim 55 depends from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met because the prior art does not disclose, teach or suggest these additional claim limitations herein added by

amendment. Hence, applicants believe claim 55 is not obvious and respectfully request the rejection be withdrawn.

#### **Claim 56**

With respect to claim 56, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claim 56. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 56 recites a transfer film carrier that includes a girdle that is contiguous with the negative draft. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a transfer film carrier that includes a girdle that is contiguous with the negative draft. The Office states that this limitation involves only routine skill in the art. Applicants traverse this statement and request that the Office provide rationale and support for the statement that a transfer film carrier that includes a girdle that is contiguous with the negative draft is common knowledge in the art.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a transfer film carrier that includes a girdle that is contiguous with the negative draft that would be combinable with Liotta given some suggestion or motivation to do so. Therefore, the first criterion requires some suggestion or motivation in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of ordinary skill in the art to modify Liotta such that the transfer film carrier includes a girdle that is contiguous with the negative draft. A suggestion or motivation must be had by one of ordinary skill to apply something the Office calls routine skill in the art in order to modify Liotta. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re

Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Office has not only pulled the limitation of a girdle from the bag of one of ordinary skill in the art without support, but also, has not provided the motivation or suggestion to apply that limitation to Liotta and modify Liotta in a fashion according to the claims in order to achieve the present invention. For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claim 56 indirectly depends from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met because the prior art does not disclose, teach or suggest these additional claim limitations herein added by amendment. Hence, applicants believe claim 56 is not obvious and respectfully request that the rejection be withdrawn.

#### **Claim 57**

With respect to claim 57, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claim 57. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 57 recites a transfer film carrier that includes a chamfer that is contiguous with the substrate surface. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a transfer film carrier that includes a chamfer that is contiguous with the substrate surface. The Office states that this limitation involves only routine skill in the art. Applicants traverse this statement and request that the Office provide rationale and support for the statement that a transfer film carrier that includes a chamfer that is contiguous with the substrate surface is common knowledge in the art.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a transfer film carrier that includes a chamfer that is contiguous with the substrate surface that would be combinable with Liotta given some suggestion or motivation to do so. Therefore, the first criterion requires some suggestion or motivation in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of ordinary skill in the art to modify Liotta such that the transfer film carrier includes a chamfer that is contiguous with the substrate surface. A suggestion or motivation must be had by one of ordinary skill to employ something the Office calls routine skill in the art in order to modify Liotta. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Office has not only pulled the limitation of a particular chamfer from the bag of one of ordinary skill in the art without support, but also, has not provided the motivation or suggestion to apply that limitation to Liotta and modify Liotta in such fashion in order to achieve the present invention. For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claim 57 indirectly depends from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met because the prior art does not disclose, teach or suggest these additional claim limitations herein added by amendment. Hence, applicants believe claim 57 is not obvious and respectfully request the rejection be withdrawn.

**Claims 58, 59, 60, 73, 74 and 75**

With respect to claims 58, 59, 60, 73, 74 and 75 applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 58, 59, 60, 73, 74 and 75. The third criterion states that the

prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claims 58 and 73 recite a transfer film having a thickness that is less than 500 microns. Claims 59 and 74 recite a transfer film having a thickness that is held to within 20%. Claims 60 and 75 recite a surface opposite the substrate surface that has a flatness that is held within five microns. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest transfer film thickness or flatness of the surface opposite the substrate surface. With respect to claims 58, 59 and 60, the Office states that “it would have been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.” (Paper No. 29, pg. 3.) Applicants traverse this statement and request that the Office provide support for this statement. Applicants believe that the statement made by the Office only applies to the optimization of ranges as applied to differences in concentration or temperature and not thickness or flatness. MPEP §2144.05(II)(A).

Alternatively, applicants request the Office to direct the applicants to where in the prior art are the “general conditions” disclosed. Applicants believe that the so-called “general conditions” of claims 58 and 73 as pertaining to the thickness and flatness are not disclosed in the prior art cited by the Office. Therefore, the thickness and flatness recited in the claims are not within the scope of the references and this rejection should be withdrawn.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a transfer film having a certain thickness or a flatness of a surface opposite the substrate surface that would be combinable with Liotta given some motivation or suggestion to do so. Therefore, the first criterion requires some suggestion or motivation in the knowledge generally available to one of ordinary skill in the art to modify Liotta. However, the Office has not shown wherein lies the suggestion or motivation for one of

ordinary skill in the art to modify Liotta to accord with the thickness and flatness recited in the claims. A suggestion or motivation must be had by one of ordinary skill to employ something the Office calls routine skill in the art in order to modify Liotta. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

Furthermore, claims 58, 59 and 60 depend from independent claim 49 which has been amended to recite a transfer film carrier that is adapted to be coupled to a vessel such that at least a portion of the transfer film is disposed inside the vessel. The third criterion is also not met with respect to these claims because the prior art does not disclose, teach or suggest these additional claim limitations herein added by amendment. Hence, applicants believe claims 58, 59, and 60 are not obvious and respectfully request that the rejection be withdrawn.

#### **Claims 61 and 62**

With respect to claims 61 and 62, applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 61 and 62. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 61 recites a transfer film that includes at least one pedestal that protrudes and defines an acquisition zone. Claim 62 recites transfer film that includes a protruding feature that runs along at least three points of a perimeter of the transfer film. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a pedestal or protruding feature according to the claims. The Office states that "a pedestal that protrudes and defines an acquisition zone is well known in the art, i.e. a cookie cutter." (Paper No. 29, pg. 3.) The Office further states that it "would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the claimed pedestal with a transfer film to make the system more accurate." (Paper No. 29, pg. 3.) The Office further states that "Shigematsu discloses a spacer 3 (fig 1) to

define a shape of the sample 11 (fig 1). (Paper No. 29, pg. 3.) Applicants traverse this rejection and maintain that the limitations of claims 61 and 62 are not disclosed or suggested in the prior art.

With respect to Shigematsu, Shigematsu discloses a method for preparing a sample for radioactivity measurement. Specifically, in Shigematsu, a sample (reference numeral 11 in FIG. 1) is prepared by being crushed between two surfaces to a thickness that is predetermined by a spacer (reference numeral 3 in FIG. 1) located between the two surfaces. In Shigematsu, the sample is “compressed to give a thin section of substantially uniform thickness.” Shigematsu, col. 2, lines 3-33. Shigematsu provides “means to uniformly press and crush the frozen biological sample containing a radioactive substance consisting of two opposite rigid planes which can be separated with a fixed space to compress the sample to a substantially uniform thickness.” Shigematsu, col. 2, lines 35-41. The thickness to which the sample is crushed is equal to the fixed distance between the two rigid planes. Shigematsu, col. 2, lines 62-65. In essence, Shigematsu teaches away from spacing a transfer film from the sample by disclosing the contacting of biological sample between two rigid planes. Shigematsu, col. 3, lines 8-11. There is no spacing away from the sample in Shigematsu. Conversely, figure 9 of Shigematsu illustrates how a sample 13 is brought into contact with another surface 11 and pressed between two surfaces 11 and 12. In contrast, in the present invention, the structural features are used to form a controllable spacing between the transfer film and the sample. Bringing the transfer film in contact to crush the sample is antithetical to principle of operation of the present invention, which is to avoid such contact that would obviously result in nonspecific transfer when applied to LCM. Hence, there is no reasonable expectation of success and furthermore there is no teaching or suggestion in Shigematsu to modify Liotta that would not render either reference useless for its intended purposes. For these reasons, these claims are not obvious in view of the prior and therefore in a condition for allowance.

**Claims 64 and 77**

With respect to claims 64 and 77, the Office states that “Liotta in view of Shigematsu do not disclose a plate, however it would have been obvious to modify Liotta with a plate to hold the LCM cap to make the system easier to operate or it easier to hold a multiple caps which make the testing process faster.” (Paper No. 29, pg. 2.) Applicants traverse this rejection.

Applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 64 and 77.

The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claims 64 and 77 recite a plate and at least one transfer film carrier coupled to the plate. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest a plate and at least one transfer film carrier coupled to the plate. In fact, the Office states that “Liotta in view of Shigematsu do not disclose a plate.” (Paper No. 29, pg. 2.) For these reasons, a prima facie case is not established because the prior art does not teach or suggest the claim limitation of a plate and at least one transfer film carrier coupled to the plate. Therefore, applicants respectfully request that the obviousness rejection be withdrawn.

The Office states that “it would have been obvious to modify Liotta with a plate to hold the LCM cap to make the system easier to operate or it easier to hold a multiple caps which make the testing process faster.” (Paper No. 29, pg. 2.) Applicants traverse this statement request that the Office provide rationale and support for the statement that a plate and at least one transfer film carrier coupled to the plate would have been obvious.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing a plate and at least one transfer film carrier coupled to the plate that would be combinable with Liotta given some suggestion or motivation to do so. Therefore, the first criterion requires some suggestion or motivation in the knowledge

generally available to one of ordinary skill in the art to modify Liotta. However, the Office has assumed that the suggestion or motivation lies in making the system easier to operate or it easier to hold multiple caps which make the testing process faster as stated by the Office. Applicants believe that the invented system is the only system of its kind for performing laser capture microdissection. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). For these reasons, the Office has failed to establish a prima facie case of obviousness and respectfully request allowance of these claims.

#### **Claims 65-67**

With respect to claims 65-67, the Office states that "Buck discloses the claimed invention except for the release layer." (Paper No. 29, pg. 3.) Also, the Office states that a "release layer consisting of silicones and polytetrafluoroethylenes is well known in the art" and that it "would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine Buck's system with a release layer to make the system easier to clean or easier to handle the tissue." (Paper No. 29, pp. 3-4.) Applicants traverse this rejection.

Applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claims 65-67. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claims 65-67 recite a release layer coated on the plate, a release layer that includes at least one nonadhesive material selected from the group consisting of silicones and polytetrafluoroethylenes, a nonadhesive material that is a silicone containing surfactant agent, respectively. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest these claim limitations. Nor does the prior art disclose the limitations of the independent and any intervening dependent claims, in particular, the claim limitation of a plate and at least one transfer film carrier coupled to the plate. The Office also cites Buck, but applicants are not sure which reference the Office is

referring to when using "Buck". Applicants respectfully request that the Office specify which reference this is. Nonetheless, the Office states that "Buck discloses the claimed invention except for the release layer." (Paper No. 29, pg. 3.) Since the prior art must teach or suggest all of the claims limitations, a prima facie case is not established because the prior art does not teach or suggest the claim limitations discussed above. Therefore, applicants respectfully request that the obviousness rejection be withdrawn.

The Office states that "it would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine Buck's system with a release layer to make the system easier to clean or easier to handle the tissue." (Paper No. 29, pp. 3-4.) Applicants traverse this statement request that the Office provide rationale and support for statement that a release layer coated on the plate and located between the carrier and plate according to claim 65, a release layer that includes at least one nonadhesive material selected from the group consisting of silicones and polytetrafluoroethylenes according to claim 66, and a nonadhesive material that is a silicone containing surfactant agent according to claim 67 would have been obvious.

Also, applicants believe that the first and second criteria listed above for establishing a prima facie case of obviousness are not met. The first criterion requires some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. In this case, the Office does not recite a reference disclosing the claim limitations of claims 65-67 and of claim 64 from which claims 65-67 depend, in particular, a plate and at least one transfer film carrier coupled to the plate that could be combined with Liotta or Buck. Therefore, the first criterion requires some suggestion or motivation in the knowledge generally available to one of ordinary skill in the art to modify Liotta or Buck. However, the Office has stated that the suggestion or motivation lies in making the system easier to clean or easier to handle the tissue. Applicants believe that the invented system is the only system of its kind for performing laser capture microdissection. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the

applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). For these reasons, the Office has failed to establish a prima facie case of obviousness and applicants respectfully request allowance of the claims.

#### **Claim 68**

With respect to claim 68, the Office states that "Liotta discloses a cap 5 (fig 2a)" and that "Liotta fails to disclose a Plano-concave void." (Paper No. 29, pg. 4.) The Office further states that it "would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Liotta's cap with a Plano-concave void to make the system more efficient." (Paper No. 29, pg. 4.) Applicants traverse this rejection.

Applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claim 68. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 68 recites the claim limitation of a plano-concave void between the film and the top surface of the plate. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest at least the claim limitation of a plano-concave void between the film and the top surface of the plate. In fact, the Office states that "Liotta fails to disclose a Plano-concave void." (Paper No. 29, pg. 4.) Since the prior art must teach or suggest all of the claims limitations, a prima facie case is not established because the prior art does not teach or suggest at least the claim limitation of a plano-concave void between the film and the top surface of the plate. Therefore, applicants respectfully request that the obviousness rejection be withdrawn.

#### **Claim 69**

With respect to claim 69, the Office states that "Liotta does not explicitly disclose a transparent thermoplastic for the LCM." (Paper No. 29, pg. 4.) The Office further states that "a skilled artisan would have been motivated to transparent thermoplastic for the LCM film to make the system transferring the sample more accurate." (Paper No. 29, pg. 4.) Applicants traverse this rejection.

Applicants believe that the third criterion listed above is not met and maintain that the prior art references do not disclose, teach or suggest all the claim limitations of claim 69. The third criterion states that the prior art references must teach or suggest all of the claim limitations in order to establish a prima facie case of obviousness. MPEP § 2143. Claim 69 recites a transfer film that includes a transparent thermoplastic. Liotta, Nagahara and Shigematsu do not disclose, teach or suggest at least the claim limitation of a transfer film that includes a transparent thermoplastic. In fact, the Office states that "Liotta does not explicitly disclose a transparent thermoplastic for the LCM." (Paper No. 29, pg. 4.) Since the prior art must teach or suggest all of the claims limitations, a prima facie case is not established because the prior art does not teach or suggest at least the claim limitation of a transfer film that includes a transparent thermoplastic. Therefore, applicants respectfully request that the obviousness rejection be withdrawn.

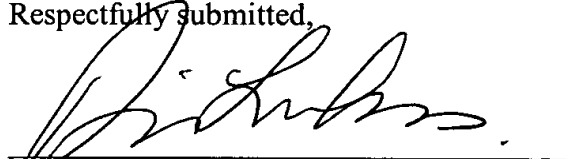
In view of the foregoing remarks, applicants respectfully submit that the application is in a condition for allowance, and action toward that end is earnestly solicited. The Office is invited to contact the applicant's representative at the number below to facilitate prosecution of this application.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief are required, applicant petitions for any required relief including extensions of time.

Respectfully submitted,

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By:



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